UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,427	02/01/2006	Manfred Bick	NY-DNAG-313-US	8861
	7590 04/25/200 & JAWORSKI, LLP		EXAMINER	
666 FIFTH AV	E		ZHU, WEIPING	
NEW YORK, NY 10103-3198			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			04/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/564,427	BICK ET AL.		
Office Action Summary	Examiner	Art Unit		
	WEIPING ZHU	1793		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>31 Mar</u> 2a)    This action is <b>FINAL</b> .    2b)    This  3)    Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 22-43 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 22-43 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acceedable and applicant may not request that any objection to the orange.	vn from consideration.  r election requirement.  r.  epted or b)  objected to by the Edrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correcti  11) The oath or declaration is objected to by the Ex		•		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1/11/2006.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate		

Application/Control Number: 10/564,427 Page 2

Art Unit: 1793

## **DETAILED ACTION**

## **Comments**

1. A word "from" should be inserted between the words "powder" and "an" in the line 1 of the claim 22.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 22-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shekhter et al. (US 6,558,447 B1).

With respect to claims 22-28, 40 and 43, Shekhter et al. ('447 B1) discloses (col. 15, lines 25-65 and col. 18, lines 28-52) a process for preparing a metal from an oxide of Nb and Ta with a reducing agent and heating the mixture in an oven to 1000°C, optionally under an atmosphere of hydrogen until a reduction starts, and leaching the reaction product; and washing and drying the resultant product to yield the metal powder, wherein the oxide has a mean particle size of 1.7 microns, a BET specific surface area of o.36 m²/g and a minimum content of 99 wt. %. The heating temperature, the particle size, the BET specific surface area and the content of Shekhter et al. ('447 B1) are within the claimed ranges in claim 23; claims 22, 24 and 43; claims 22, 25 and 26; and claims 22, 27, 28 and 40 respectively. A prima facie case of obviousness exists. See MPEP 2144.05 I.

With respect to claims 29-34, Shekhter et al. ('447 B1) discloses the impurity levels of Fe and Al, Si, Na, P in the oxide are less than 19 ppm, less than 7 ppm, less than 11 ppm, and negligible ppm respectively (col. 15, lines 25-40), which read on the claimed ranges respectively.

Page 3

With respect to claims 35 and 36, Shekhter et al. ('447 B1) does not disclose the features. However, it has been well held where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977), MPEP 2112.01 [R-3] I. In the instant case, the claimed and Shekhter et al. ('447 B1)'s oxides are identical or substantially identical in composition and are produced by identical or substantially identical processes, therefore a prima facie case of obviousness exists. The same loss on ignition of the oxide at 1000°C as constant weight and the same tamped down bulk density would be expected in the oxide of Shekhter et al. ('447 B1) as in the claimed oxide.

With respect to claim 37, Shekhter et al. ('447 B1) does not disclose replacing the oxide by an additive of up to 15 wt. % of the oxide as claimed. However, the 0 wt. % of the low limit of the additive does not require the presence of the additive. Therefore, the oxide of Shekhter et al. ('447 B1) still meets the claim limitation.

With respect to claims 38-40, Shekhter et al. ('447 B1) discloses pure Mg was used as the reducing agent (col. 15, lines 50-53).

With respect to claim 41, Shekhter et al. ('447 B1) discloses the reaction is performed under an argon protective gas (col. 15, lines 55-60).

With respect to claim 42, Shekhter et al. ('447 B1) discloses the reaction product is leached with diluted mineral acid (col. 11, lines 40-51), which includes the claimed hydrochloric acid.

## Conclusion

3. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/564,427 Page 5

Art Unit: 1793

/Roy King/ Supervisory Patent Examiner, Art Unit 1793

WZ

3/31/2008